THE ANNALS

AND

MAGAZINE OF NATURAL HISTORY.

[EIGHTH SERIES.]

No. 101. MAY 1916.

XL.—New Tipulidæ from the Malay Peninsula. By F. W. Edwards, B.A., F.E.S.

(Published by permission of the Trustees of the British Museum.)

Among a collection of mosquitoes recently received by the Imperial Bureau of Entomology, from Dr. A. T. Stanton of Kuala Lumpur, were eight specimens of crane-flies which the sender wished to have named. These were referred to the writer for examination, and proved to belong to seven undescribed species. Descriptions of these are appended in the following pages, and the opportunity has been taken of including a few other hitherto-undescribed species from the same region, which are represented in the British Museum collection. The types of Dr. Stanton's new species have been presented to the British Museum by the Imperial Bureau of Entomology.

Subfam. TIPULINA.

Group Dolichopezini.

MITOPEZA, gen. n.

No distinct nasus. Antennæ (?) 12-jointed, not longer than head and thorax; flagellar joints slender, with fine pubescence and a few stiff hairs on the upper side. Third antennal joint longer than the first two together. Pronotum not prominent. Ovipositor (fig. 1, p. 356) extremely short, Ann. & Mag. N. Hist. Ser. 8. Vol. xvii. 24

the lower valves fleshy and hairy; ducts of spermathecæ enormously long, if uncoiled they would be much longer than the whole body. Legs long and slender, the tarsi hair-like. Venation: Rs moderately short; R_2 vertical, but scarcely perceptible, being only represented by a slight thickening of the membrane; base of R_{4+5} vertical, in a straight line with the R-M cross-vein; cell 1st M_2 present, twice as long as broad; cell M_1 sessile; Cu_1 fused with M for a considerable distance, but leaving it again before the fork; cell Cu_1 broadest at the base; Cu_2 straight; Ax rather long.

Genotype.—The species described below.

Mitopeza differs from Dolichopeza in possessing the cell 1st M_2 and in the position of the fork of M_1 , which is just before the R-M cross-vein instead of far beyond it, and from all other genera of the Dolichopezini in the fusion of Cu_1 with M taking place well before the fork. The female genitalia are very remarkable.

Mitopeza nitidirostris, sp. n. (Fig. 1, p. 356.)

2. Head dull, dark brownish; front smooth, a quarter of the width of the head in its narrowest part. Proboscis shining, brownish, shorter than the head. Labella and palpi blackish. Antennæ scarcely as long as the head and thorax together; scape and first flagellar joints light brown, remainder dark brown. First joint about twice as long as broad; second nearly round, narrower towards the base; third joint slender, half as long again as the first two together; fourth rather more than half as long as the third, remainder gradually and slightly decreasing in length. Second joint with a small forwardly-projecting tuft of black hairs on the inner side; flagellar joints with inconspicuous hairs on the upper surface. Thorax dark brown, with indications of three darker stripes above extending from the front margin to the suture. Mesonotum scarcely, pleuræ considerably shining. Abdomen dark brownish, with shimmering whitish lateral spots (the specimen is too contorted to describe accurately). Legs blackish, femora lighter on the basal fourth (middle legs missing). Wings somewhat infuscated, strongly iridescent; stigma dark brown, with a whitish spot on each side, that towards the apex being the more conspicuous; a minute whitish spot over the veins at the base of cell 1st M2; cross-veins and branches of Cu narrowly bordered with fuscous, especially on Cu1a. Halteres with pale stem and dark knob.

Length of body about 7 mm.; wing 12 mm.

Kedah: Kedah Peak, 3200 ft. (Dr. A. T. Stanton), 1 \(\text{?} \). In coloration M. nitidirostris must strongly resemble Tipula sinabangensis, de Meij., recently described from Simalur, but presumably de Meijere's species has the venation of a Tipula, though he does not describe the wing in detail.

Group TIPULINI.

Tipula klossi, sp. n.

2. Head dark brown, with a blackish median line; front occupying more than a quarter of the width of the head. rather prominent above the antennæ. Proboscis brownish. shorter than the head; nasus extremely short, a mere rounded prominence; palpi dark brown. Antennæ 13jointed, the 13th joint less than half as long as the 12th. Scape light brownish. First flagellar joint cylindrical, light brownish, with some short black hairs in the middle on the underside, longer than the first scapal joint; intermediate flagellar joints light brown with a blackish base which is slightly enlarged on the upper side; last two or three joints entirely dark brown; verticillate hairs much longer on the upper side of the joints than on the lower. Thorax dull. brown, with four darker brown stripes, the lateral pair shortened in front and extending back on to the scutum. Postnotum more greyish in the middle. Abdomen rather light brownish, the segments with dark brown bands apically. Legs blackish, the femora lighter towards the base. Wings very slightly infuscated, the costal cell rather more so; stigma dark brown; a narrow dark brown cloud over Cu,a; a small whitish spot on each side of the stigma, and another obliquely across cell 1st M2. Pubescence on the veins in the apical part of the wing very noticeable. Venation: Rs extremely short, much shorter than the stigma, and equal in length to the first section of M1+2. Stalk of cell M_1 nearly one-third as long as the cell. Cu_1 meeting M exactly at the fork and fused with M3 for about half the length of the cell 1st M2. Cross-vein connecting M1+2 with M₂ extremely short, the cell 1st M₂ being therefore almost diamond-shaped. M2, M3, and the descending portion of Cu, parallel and rather close together. Anal angle of wing well-marked, the cell Ax, therefore, broadest in the middle. Halteres light brownish, the club somewhat darker.

Length of body 13 mm.; wing 11 mm.

Kedah Peak, 3200 ft. (Dr. A. T. Stanton), 2 \(\) (type in British Museum; paratype in Kuala Lampur

Museum).

In the rudimentary nasus, the extreme shortness of Rs, and the long fusion of Cu_1 with M_3 , as well as in the small size of the cell 1st M_2 , this species is very distinct. T. inconspicua, de Meij., is similar in many respects, but in that species the contact of Cu_1 with M_3 is almost punctiform. In the rudimentary nasus and the shortness of the verticillate hairs on the under side of the flagellum the new species resembles the European T. variicornis, Schum.

Subfam. LIMNOBIINÆ.

Group LIMNOBIINI.

Rhipidia rostrifera, sp. n.

3. Head brownish-grey. Proboscis black, slightly longer than the head; palpi black, placed near the tip of the proboscis. Antennæ: first joint yellowish, dark at the tip; second joint yellowish; third to thirteenth joints obscurely yellowish, dark at the base, from which springs a pair of long black pubescent processes; the processes on the third and thirteenth joints are not much longer than the joint, those on the intermediate joints are much longer, the longest being quite four times the length of a joint; fourteenth joint black, simple, rather longer than the others. Thorax covered with a brownish-grey pollinosity, without distinct markings, a dark central line, however, is observable when the thorax is looked at from behind. Abdomen dark brown; in certain lights the hind margins of the segments are whitish. Genitalia of the ordinary Dicranomyia type. Legs brownish, femora lighter towards the base; claws simple. Wings hyaline with four dark brown spots on the costa situated at the tip of the wing, the tip of Sc, the tip of R₁, and the middle of Sc, the last two being larger than the first two; there is also a dark brown spot in the base of the basal cells and another at the tip of Ax; the tips of the other veins and the cross-veins are also darkened, but less conspicuously. Sc1 ending opposite base of Rs, Sc2 near its tip; cells 1st and 2nd M₁ confluent (i. e., discal cell open, confluent with the 2nd posterior); Cu1a meeting M at the fork. Veins dark, except costa, Sc, and R1, which are vellow except where crossed by the dark spots. Halteres with yellow stem and black knob.

Length of body 5 mm.; wing 5 mm.

KEDAH: Kedah Peak, 3200 ft. (Dr. A. T. Stanton), 1 &. Readily distinguishable from the other Oriental species by the wing-markings.

Limnobia crocea, sp. n.

Head: vertex orange, blackish anteriorly; front grey, linear, the eyes almost touching for a considerable distance. Proboscis, palpi, and antennæ entirely black. Flagellar joints (except the first) each with a single very long hair in the middle on the upper side, and a few short ones below; first few joints of the flagellum rounded, remainder gradually becoming elongate-oval; last joint slender and nearly twice as long as the penultimate. Thorax entirely orange, except for a broad black median stripe on the præscutum and two large black spots on the scutum, the black parts shining, the rest not. Abdomen orange except the eighth segment and male genitalia, which are black; ovipositor orange. Legs: coxæ and trochanters orange, remainder black. Wings slightly tinged with brownish-yellow, stigma small, brown; larger brown spots over the base of Rs and the apex of Sc, and a brown band over the central cross-veins which practically reaches the hind margin; basal fifth of wing dark brown. Venation as in L. longinervis, Brun., except that the marginal cross-vein is long, oblique, and slightly curved, simulating the tip of R1, the real tip being less distinct and turned sharply up to the costa. Halteres with orange stem and black knob.

Length of body 7-10 mm.; wing 9.5-11 mm.

SIAM: Sungkie, 9. ii. 1902 (Robinson & Annandale), 1 &,

The only previously described species with which this can be compared is *L. longinervis*, Brun., which is quite distinct in coloration. Both species might be placed almost equally well in *Libnotes*.

Libnotes scutellata, sp. n. (Fig. 2, p. 356.)

Head deep ochreous. From very narrow. Proboscis and palpi blackish. Antennæ shorter than the thorax, scape blackish, flagellum brownish. Basal flagellar joints expanded apically, scarcely longer than broad; apical joints more slender, but hardly longer, except the last one; hairs short. Thorax: pronotum ochreous; a brown streak on each side below its edge, almost connected with a rather large brown patch above the front coxæ. Præscutum brownish-ochreous; two pairs of brown marks on the

lateral margin, on each side of the pseudo-suture; two pairs of short brown streaks above near the suture, the outer pair very small. Scutum ochreous, paler in the middle, with a pair of dark brown spots. Scutellum whitish, the posterior margin narrowly blackish. Postnotum dark brown, rather narrowly ochreous at the sides. ochreous; a small, roundish, blackish-brown spot below and in front of the root of the wing, and a dark brown patch just above and in front of the middle coxa. Abdomen ochreous; a narrow blackish lateral line, most distinct on the basal segments, and more prominent in the male than in the female. Hypopygium, fig. 2. Legs ochreous brown; tips of tibiæ and a preapical ring on the femora dark brown. Wings slightly ochreous-tinged, with numerous brown patches, the three largest of which are near the base of the cell R, at the anal angle, and over the tips of M₁, M₂, and Cu₁; others are situated over the cross-veins, at the base of Rs, at the tips of Sc, R1, Cu2, and Ax, at the fork of M_{1+2} , and near the base and apex of R_{2+3} ; besides these there are a few other smaller spots on some of the veius. Venation: R₁ continued beyond the cross-vein for more than twice the length of the latter before turning up to the costa; cell 1st M₂ about five times as long as its greatest breadth: M₁₊₂ forking a little before middle, and Cu₁ meeting M at about one-third of cell 1st M2. Halteres

Length of body 15 mm.; wing, 3 20 mm., 2 17 mm. Siam: Talum, 18. i. 1902 (Robinson & Annandale), 1 3, 2.

Allied to L. pæciloptera, O.-S., in venation, but readily distinguished by the thoracic and wing markings.

Libnotes stantoni, sp. n.

9. Head brownish; proboscis, palpi, and antennæ black, except the last four flagellar joints, which are dark brownish. Front very narrow. Basal flagellar joints almost rounded, very little longer than broad, the other joints becoming towards the apex gradually more slender and rather longer, so that joints 11-13 are nearly three times as long as broad, and very little broader in the middle; the last joint is slender, four or five times as long as broad; short hairs on the upper sides of the flagellar joints. Thorax slightly shining, dark brownish, without distinct markings except for the usual pair of darker spots on the scutum; a dark patch on the pleuræ above the front coxæ; postnotum

Abdomen ochreous, without markings; long blackish. yellow hairs at the base of the ovipositor. Legs brown, femora with a black preapical ring. Wings very faintly yellowish-tinged, the base of the wing and the costal cell conspicuously so; veins yellowish, black where the dark markings cover them. Anal angle darkened; a fuscous band near the base of the wing extending almost continuously from R to the hind margin and covering the apex of Ax; fuscous clouds over all the cross-veins and the base of Rs, the tips of R₁ and Cu₂, and the base of the fork of M_1 and M_2 ; in addition, there is a cloud near the base of R_{2+3} which just extends on to R_{4+5} , another near the apex of R_{2+3} , and one at the tip of M_1 which just extends on to the tip of M₂; a few other dark specks on the veins of the apical third of the wing. Sc₂ exactly at the tip of Sc₁; R₁ continued beyond the marginal cross-vein for a distance rather greater than the length of the cross-vein, then turned sharply up to the costa, with a stump at the angle; Rs nearly three times as long as the basal section of R_{4+5} ; M₁₊₂ forks a little before middle of cell 1st M₂; Cu₁ meeting M₃ a little before the fork of M₁ and M₂; cell 1st M, more than three times as long as its greatest width. Halteres ochreous.

Length of body 9 mm.; wing 11 mm.

KEDAH: Kedah Peak, 3200 ft. (Dr. A. T. Stanton), 1 \(\tau\). This species is in some respects intermediate between L. notatinervis, Brun., and L. punctipennis, Meij., but seems to be distinct from both. The wing-markings are very similar to those of L. scutellata, but not quite so extensive; L. scutellata also differs in its thoracic markings and its much greater size.

Libnotes limpida, sp. n.

Q. Head rather dark ochreous-brown; proboscis and antennæ brownish, the latter light ochreous apically. Flagellar joints rounded, only the last two or three being rather more elongate. Thorax: præscutum brownish, lighter in front, whitish in the middle posteriorly; scutum, scutellum, and postnotum whitish-ochreous; postnotum brownish at the sides, with a small blackish spot on each side at the base; pleuræ light ochreous, a black dot beneath the root of the wing, and several small short brownish streaks, some of which form a discontinuous line across the middle of the coxæ. Abdomen dingy ochreous, the segments darker towards the base on the dorsal side. Legs light

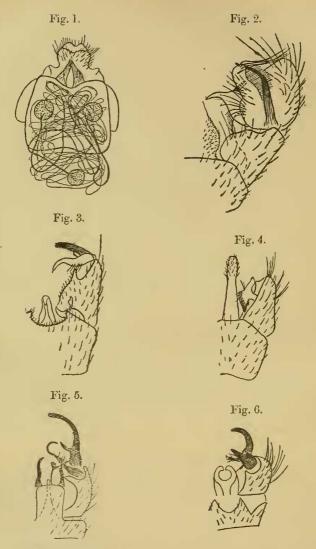


Fig. 1.—Mitopeza nitidirostris, gen. et sp. n. Apex of Q abdomen from above. The tergite is represented as transparent, in order to show (diagrammatically) the spermathecæ with their coiled ducts.

Fig. 2.-Libnotes scutellata, sp. n. Left half of hypopygium from above.

Fig. 3.—Rhamphidia nigriceps, sp. n. Fig. 4.—Gymnastes pictipennis, sp. n. Fig. 5.—Gnophomyia maculipleura, sp. n.

fraterna, sp. n. 22

All figures made with aid of camera lucida from balsam preparations.

ochreous, tips of tibiæ and a preapical ring on the femora brownish. Wings slightly greyish, without distinct dark markings on the membrane; veins yellowish, cross-veins, base of Rs, tips of R_1 , M_1 , M_2 , Cu_1 , Cu_2 , An, and Ax, and base of fork of M_1 and M_2 , dark; a dark mark near base and another smaller one near apex of R_{2+3} , another near base of An. Venation much as in L. stantoni, but R_1 not continued quite so far beyond the cross-vein as the length of the latter; M_{1+2} forking beyond the middle of cell 1st M_2 , and Cu_1 meeting M_3 before one-third of this cell. Halteres ochreous.

Length of body 9 mm.; wing 11 mm.

KEDAH: Kedah Peak, 3200 ft. (Dr. A. T. Stanton), 1 \, \text{Though it might be taken for a very pale specimen of L. stantoni, this species is undoubtedly distinct, if only on account of the structural difference in the antennæ.

Libnotes lutea, sp. n.

Q. Head dark grey, whitish round the eye-margins; front narrow, silvery. Proboscis and palpi brownish. Antennæ with the scape light brown, the flagellum dark brown; flagellar joints oval, shortly stalked, the last two or three more elongate. Thorax uniformly shining light ochreous, except for a dark brown spot on each side of the scutum immediately in front of the root of the wings. Abdomen uniformly shining light ochreous. Legs light ochreous, the extreme tips of the femora and tibiæ and the last three or four basal joints dark. Wings practically hyaline, with light fuscous stigma; veins yellowish, except the central cross-veins and the whole of Cu, which are dark: extreme tip of wing indistinctly darkened. Sc2 strong, oblique, more conspicuous than the tip of Sc1; tip of R1 turned sharply up to the costa, simulating a cross-vein, the marginal cross-vein right-angled, with a short stump arising from the angle, the horizontal portion longer than the vertical (in other words, the first longitudinal vein ends in the second and is connected with the costa by a crossvein); cell 1st M2 less than three times as long as broad, M₁₊₂ forking near its apex; Cu₁ meeting M₃ a little before middle of cell.

Length of body 6 mm.; wing 7 mm.

KEDAH: Kedah Peak, 3200 ft. (Dr. A. T. Stanton), 1 \, \text{This species seems to be quite distinct in coloration from any previously described.}

Group RHAMPHIDIINI.

Rhamphidia nigriceps, sp. n. (Fig. 3, p. 356.)

Head velvety blackish-brown, from rather narrow, with a small grey spot above the antennæ. Antennæ, proboscis, and palpi brown. Proboscis a little longer than the head. Antennæ not much longer than the proboscis; first five flagellar joints roundish, remainder oval; hairs about twice as long as each joint. Thorax dark brown above, lighter brown on the pleuræ, without markings. Abdomen uniformly dark brown; ovipositor lighter. Hypopygium, fig. 3. Legs dark brown, the tarsi lighter apically. Wings nearly hyaline, stigma rather faint. Venation: Sc1 continued far beyond base of Rs, its tip much less distinct than Sc, Rs arising exactly in middle of wing-length; cell R1 narrow in apical third; R₁ and R₂₊₃ ending in costa rather close together; R-M cross-vein present, situate about its own length beyond the fork of Rs; cell 1st M, pentagonal, its apical side shortest; Cu1 meeting M just before or at the base of the cell. Halteres brown.

Length of body 4-5 mm.; wing 5-6 mm.

SIAM: Bukit Besar, 2 & (incl. type), 1 9; Talum,

18. i. 1901, 2 ♂, 1 ♀ (Robinson & Annandale).

Differs from R. kambangani in the blackish head and the position of Cu₁.

Rhamphidia rufescens, sp. n.

Head light grey; proboscis, palpi, and scape of antennæ light reddish brown; flagellum brownish, the basal joints round, the rest oval, last three or four a little more elongate, and with longer hairs, the hairs on the rest of the flagellum being very short. Thorax and abdomen slightly shining, uniformly light reddish-brown. Legs light brownish. Wings transparent; venation as in R. nigriceps. Halteres pale.

Length of body 5 mm.; wing 5.5 mm.

SELANGOR: Bukit Kutu, Feb. 1903 (Dr. H. E. Durham),

1 ♀.

Evidently closely related to the preceding, but seems distinct on account of its grey head, lighter colour, and slightly different antennæ. It should be noted that the specimen is somewhat immature.

Gymnastes pictipennis, sp. n. (Fig. 4, p. 356.)

Head yellowish, darker in the middle, rather thickly covered with black hair; from very broad. Scape of

antennæ reddish-brown; flagellum black, the joints oval, with long hairs. Thorax almost uniformly shining blueblack, tinged with brown on the sides of the mesonotum. Pronotum well developed, but not to the same extent as in typical Teucholabis. Abdomen uniformly dark purplish, somewhat shining. Hypopygium, fig. 4. Legs dark, clothed with dark purple scales, a narrow ring of yellow on the apical third of each femur; the femora are not clubbed, but gently and slightly enlarged towards their tips. whitish hyaline, with three complete dark brown fasciæ, the first well before, the second immediately beyond the middle, the third occupying rather more than the apical fourth of the wing; the first fascia is nearly or quite connected with the second by a median projection in cell M; the second has its distal margin irregularly concave, and between it and the third is a squarish dark brown spot over the apex of cell 1st M₂. Venation: R₂ present, short, ending exactly in the tip of R₁; Rs arising before one-third of the wing-length. not at all curved at its base; marginal cross-vein situated on R₂ a little beyond its base; cell 1st M₂ about twice as long as broad, scarcely narrowed at the base, the three veins at its apex equidistant; R-M cross-vein joining M1+2 a little beyond its base; Cu₁ meeting M₃ near base of cell 1st M₂. Halteres black, tip of knob white.

Length of body 6 mm.; wing 6 mm.

SIAM: Bukit Besar (Robinson & Annandale), 2 3.

The genus Gymnastes was founded by Brunetti in 1911 for G. violaceus, Brun. (= Teucholubis cyanea, Edw.), the author differentiating it from Teucholabis chiefly on the absence of a distinct neck and the clubbed femora. Neither of these characters being of much value, Alexander proposed to sink Gymnastes in Teucholabis, a course which the writer was till now inclined to favour. G. cyaneus, however, shares with the present new species the very peculiar character (for a Tipulid) of having the legs covered with scales; and this, together with some other minor characters, such as the reduced neck and the colour of the halteres, will perhaps serve to keep Gymnastes distinct. The apparent gulf between G. cyaneus and G. pictipennis with regard to neuration is bridged by Gnophomyia ornatipennis, de Meij., which is almost identical with G. cyaneus in colouring and yet has R₂ present, and in much the same condition as in G. pictipennis. A specimen of an undescribed Japanese species or variety closely resembling G. ornatipennis is in the British Museum collection, and shows the same scales on the legs as in G. cyaneus and G. pictipennis. I have,

therefore, no hesitation in referring *Gnophomyia ornatipennis*, de Meij., to *Gymnastes*, which is a very interesting genus, as it appears to connect *Teucholabis* with the *Gnophomyia* group. The hypopygium shows a greater resemblance to *Teucholabis* than to *Gnophomyia*.

Group ERIOPTERINI.

Gnophomyia maculipleura, sp. n. (Fig. 5, p. 356.)

Head dull blackish, front very broad. Antennæ nearly twice as long as the thorax in both sexes; scape light brown, flagellum dark brown; first joint not much longer than broad, second round; flagellar joints elongate-oval, almost cylindrical, at the base about four times as long as broad, at the apex not quite so long, all clothed with a dense pubescence as long as their width and with rather numerous hairs as long as the length of the joints. Thorax dark reddish-brown, scutellum and pleuræ lighter, the pleuræ with two large roundish black spots, one on the hypopleura and one just below and in front of the root of the wing. Abdomen uniformly dark brown. Hypopygium, fig. 5. Ovipositor resembling that of G. orientalis, de Meij. Legs brownish, tarsi somewhat darker. Wings hyaline, the veins blackish, stigma faint. Venation as in G. orientalis, de Meij., the relative lengths of Rs and R₂₊₃ are somewhat variable. The pubescence on the veins is not quite so noticeable as in de Meijere's figure. Halteres blackish.

Length of body, & 4 mm., ♀ 5 mm.; wing, & 4 mm.,

♀ 5 mm.; antennæ 2 mm.

SIAM: Bukit Besar (Robinson & Annandale), 2 & (incl.

type), 1 ♀.

This species belongs to the same group as the American G. tristissima, O.-S., the type of the genus. As Osten-Sacken long ago pointed out, there are two distinct types at present included within the genus; in the present writer's opinion the other group might well be removed to a distinct genus, to which the name Dasymallomyia may perhaps be applicable, though D. signata, Brun., the type of this latter genus, presents some rather noticeable differences from the other species, such as G. luctuosa, O.-S., and G. elegans, Wied.

G. maculipleura is evidently closely allied to G. orientalis, de Meij., and may eventually prove to be the same species, but appears to be well distinguished by the two distinct blackish spots on the pleuræ.

Gnophomyia fraterna, sp. n. (Fig. 6, p. 356.)

Coloration and wing-venation as in G. maculipleura, but the antennæ a little shorter, the pubescence on the flagellum longer and the hairs shorter, so that the difference in length between pubescence and hairs is not so noticeable; male genitalia (fig. 6) of quite different structure; pubescence of wing-veins rather more evident.

SELANGOR (A. L. Butler), 1 3.

Gnophomyia nigrescens, sp. n.

Whole body, except the ovipositor, blackish, somewhat shining. Antennæ a little longer than the head and thorax together, with long hairs as in G. maculipleura, but here the flagellar pubescence is rather longer and less regular. Ovipositor reddish-brown, of similar structure, but rather longer than that of G. maculipleura. Wing as in G. maculipleura; legs rather darker.

SIAM: Talum, 3500 ft., 17. i. 1902 (Robinson & Annandale),

1 9.

Oxydiscus umbrosus, sp. n.

Q. Head dull grey; front almost silvery, broad and rather swollen. Antennæ 15-jointed, first joint yellowish, dark at the tip, second joint whitish, remainder blackish; joints 3-5 rather broadly oval, joint 6 cylindrical, a little longer than broad, joints 7-15 cylindrical, rather more than twice as long as broad. Thorax: mesonotum shining ochreous-brown, without markings; pleuræ light ochreous with two indistinct dark stripes. Abdomen dark brown, ovipositor lighter. Legs almost uniformly light ochreous. only the apical tarsal joints lighter. Wings slightly grevish with darker clouds at the tips of all the veins (except Sc) and over the cross-veins; additional dark clouds over the base of Rs, at the base of the forks of M1 and M2, and in the middle of cell 1st R₁. Tip of wing slightly hairy. Rs angulated near the base, the cell 1st R₁ rather broad; marginal cross-vein vertical, placed exactly at the fork of R₂₊₃; cross-vein R-M meeting M₁₊₂ a little above the fork, so that cell 1st M2 does not quite come to a point at the base; fork of M1 and M2 scarcely as long as the second section of M₁₊₂; second section of M₃ straight and scarcely longer than the cross-vein connecting it with M1+2; Ax turned rather sharply downwards at the tip. Halteres light ochreous.

Length of body 4 mm.; wing 4 mm.

Kedah: Kedah Peak, 3200 ft. (Dr. A. T. Stanton), 1 \, \text{In spite of its obviously close relationship with O. nebulosus, de Meij., there are a number of small differences in venation in which the new species bears a greater resemblance to Cladura. The characters common to both species of Oxydiscus, distinguishing them from Cladura, are the shortness of Sc and the presence of surface-hairs towards the apex of the wing.

XLI.—A new Species of the Amphipodan Genus Hyale from New Zealand. By Chas. Chilton, M.A., D.Sc., LL.D., F.L.S., C.M.Z.S., Professor of Biology, Canterbury College, New Zealand.

The genus Hyale is represented in New Zealand by several species, of which, perhaps, the commonest is H. rubra (G. M. Thomson), which is found on all parts of the New Zealand coast, and agrees well with the brief description given by Stebbing in ⁷ Das Tierreich, Amphipoda' (p. 572). In November 1915 a number of specimens of Hyale were sent to me by Mr. P. W. Grenfell from Cuvier Island. Most of these proved to belong to Hyale rubra, but among them there was one that attracted my attention by its peculiar maxillipedes, the terminal joints of which were greatly expanded and thickly covered with long setæ. On examination it proved that this specimen, which was a male, differed from H. rubra in the second gnathopod also, and I am therefore describing it as a new species. Unfortunately I have only the single specimen, but the characters of the maxillipedes and the second gnathopods are so distinctive that it will be easy to recognize it again. It is quite likely that the peculiar development of the maxillipedes is found in the male only, and is to be looked upon as a secondary sexual character, but the female of this species is at present unknown. following will serve as a description:

Hyale grenfelli, sp. n. (Figs. 1-5.)

Specific diagnosis. Male.—In general resembling H. rubra (G. M. Thomson), but differing in the maxillipedes, which have the carpus and propod greatly dilated and thickly covered with long slender hairs, and in the second gnathopod, in which the palm is only slightly oblique, well defined, broad, the margin on both outer and inner sides being deeply